Index of Claims



Application/Control No.

09/676,727

Examiner

Herng-der Day

Applicant(s)/Patent under Reexamination

CANNING, FRANCIS X.

Art Unit

2128

| √ | Rejected |
|---|----------|
| 1 | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| 2 | Non-Elected  |
|---|--------------|
| - | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla   | aim   | Date   |  |                                       |   |  |          |              |          |          |  |
|-------|---|--|--|---------------------------------------|---|--|----------|--------------|----------|----------|--|
| Final | Original  | 6/13/05  | 12/9/05                                | 8/18/06                               | 1/19/07   |  |          |              |          |          |  |
|       | 1   | J  | V                                      | V                                     | V   |  | $\vdash$ | -            | ┢        | ╁        |  |
|       | 2   | Ì  | V                                      | Ì                                     | V   | Т  | T        | T            | T        |          |  |
|       | 3   | 1  | V                                      | 1                                     | V   |  |          |              |          | Τ        |  |
|       | 4   | ✓  | ✓                                      | ✓                                     | ✓   |  |          |              |          |          |  |
|       | 5   | ✓  | ✓                                      | ✓                                     | V   |  | L        |              |          |          |  |
|       | 6   | ✓  | ✓                                      | ✓                                     | ✓   |  |          |              |          |          |  |
|       | 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>33<br>33<br>34<br>35<br>36<br>37<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38 | \rangle \rangl | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | \<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\<br>\ |  |          |              |          | <u> </u> |  |
|       | 8   | ✓  | V                                      | √                                     | l√.   | L  | ↓_       | ╙            | <u> </u> | <u> </u> |  |
|       | 9   | V  | √                                      | √                                     | Į √   | _  | ┞        | <u> </u>     | <u> </u> | ļ        |  |
|       | 10  | Ý  | 1                                      | Ϋ́                                    | ΙÝ  | _  | ╄        | ├            | <u> </u> | _        |  |
|       | 11  | \<br>\<br>'  | 1                                      | <b>√</b>                              | \<br>/  |  | $\vdash$ | $\vdash$     | -        | ļ        |  |
|       | 12  | \<br>/   | 1                                      | √<br>                                 | 1   | ├-   | ╀        | -            | ├        |          |  |
|       | 1/  | V  | V                                      | \ \ \ \                               | \<br>\<br>\   | ⊢  | ┢        | H            | ┢        | -        |  |
|       | 15  | 1  | 1                                      | 7                                     | 1   | $\vdash$   | ├        | ┢            | -        | -        |  |
|       | 16  | 1/   | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \  | \ <del>\</del>                        | \ <del>\</del>  | ┝  | ├        | ┢─           | ┢        | H        |  |
|       | 17  | 1  | 1./                                    | \ <u>\</u>                            | 1   | ┢  | $\vdash$ | -            | $\vdash$ | $\vdash$ |  |
|       | 18  | 1  | 1                                      | 1                                     | 1   | <del>                                     </del> | ╁        | Н            |          |          |  |
|       | 19  | 1  | V                                      | Ĭ                                     | Ť   | <del>                                     </del> |          |              |          |          |  |
|       | 20  | Ĭ  | Ţ                                      | Ť                                     | Ì   | _  | $\vdash$ | t            |          |          |  |
|       | 21  | V  | Ţ                                      | Ì                                     | Ì   | $\vdash$   | t        |              |          |          |  |
|       | 22  | V  | V                                      | V                                     | V   |  |          |              |          | T        |  |
|       | 23  | V  | V                                      | -                                     | -   |  |          | 7            |          | T        |  |
|       | 24  | ✓  | <b>V</b>                               | 1                                     | •   |  |          |              |          |          |  |
|       | 25  | <b>✓</b>   | <b>✓</b>                               | -                                     | _   |  |          | $oxed{\Box}$ |          |          |  |
|       | 26  | ✓  | ✓                                      | •                                     | •   |  |          |              |          |          |  |
|       | 27  | ✓  | ✓                                      | •                                     | -   |  |          |              |          |          |  |
|       | 28  | ✓  | ✓                                      | .   .                                 | -   | _  | _        |              |          |          |  |
|       | 29  | ✓  | √_                                     |                                       | -   | <u> </u>   | _        |              |          |          |  |
|       | 30  | Ý  | √                                      | •                                     | -   | <u> </u>   | _        | _            | <u> </u> | Ш        |  |
|       | 31  | <b>√</b>   | <b>√</b>                               | _                                     |   | <u> </u>   | <u> </u> | _            | <u> </u> |          |  |
|       | 32  | <b>V</b>   | √<br>.,                                | -                                     |   | _  | ├-       | ļ            | <u> </u> |          |  |
|       | 34  | <b>×</b>   | <b>√</b>                               | -                                     | -   | -  |          | _            | $\vdash$ | Н        |  |
|       | 35  |  | <b>V</b>                               | <b>V</b>                              | V   |  |          | -            | -        | H        |  |
|       | 36  | Н  | ·/                                     | <<<<<<                                | > > > > - >   |  | _        | -            | -        | Н        |  |
|       | 37  |  | 7                                      | <u>√</u>                              | ./  |  | -        | $\vdash$     | $\vdash$ | Н        |  |
|       | 38  |  | Ţ                                      | <del>V</del>                          | <u> </u>  | _  | ┢─       | -            | $\vdash$ | Н        |  |
|       | 39  |  | Ĭ                                      | Ĭ                                     | J   |  | ┢        |              | _        | Н        |  |
|       | 40  |  | V                                      | Ž                                     | Ţ   |  | _        |              |          | H        |  |
|       | 41  |  | V                                      | V                                     | <b>√</b>  |  |          |              |          | П        |  |
|       | 42  |  | V                                      | V                                     | $\sqrt{}$   |  |          |              |          | П        |  |
|       | 43  |  | <b>√</b>                               | <b>√</b>                              | ✓   |  |          |              |          |          |  |
|       | 44  |  | √                                      | ✓                                     | ✓   |  |          |              |          |          |  |
|       | 45  |  | √                                      | ✓                                     | ✓   |  |          |              |          |          |  |
| ]     | 46  |  | √                                      | ✓                                     | ✓   |  |          |              |          |          |  |
|       | 47  |  | ✓                                      | ✓                                     | √   |  |          |              |          |          |  |
|       | 48  |  | ✓                                      | ✓                                     | <b>✓</b>  |  | Ш        |              |          | Ш        |  |
|       | 49  |  | <b>√</b>                               | <u>√</u>                              | ✓   |  |          |              |          | Щ        |  |
| - 1   | 50  |  | ٠./I                                   | ٠/١                                   | √l  |  | 1 .      |              | 1        |          |  |

| Cla             | aim      | Г        |          |          |          | Date   |          |          |          |               | )   | Cia         | im      |          |               |          |          | Date     | e             |          |  |          |
|-----------------|----------|----------|----------|----------|----------|--------|----------|----------|----------|---------------|-----|-------------|---------|----------|---------------|----------|----------|----------|---------------|----------|--|----------|
|                 |          |          |          |          |          | ثَثَ   | Г        | Π        | Γ        | 1             |     |             |         | $\vdash$ |               |          | Ī        |          | Ĺ             | Ι        |  | Г        |
| 匢               | Original | 6/13/05  | 12/9/05  | 8/18/06  | 1/19/07  | 1      |          |          |          |               |     | 펺           | Origina |          | 12/9/05       | 8/18/06  | /0/      |          | l             |          |  |          |
| Final           | rig      | /13      | 578      | /18      | /19      |        |          |          |          |               | li  | Final       | Ē       |          | 2/9           | /18      | 1/19/07  |          |               |          |  |          |
| _               | 0        | ဖ        | 1        | 8        | 1        |        |          |          |          |               |     | _           | Ö       |          | 1             | 80       | 1        |          |               |          |  |          |
|                 | 1        | √        | <b>√</b> | <b>√</b> | <b>√</b> |        |          | -        | ┢        | T             |     |             | 51      |          | <b>√</b>      | <b>√</b> | <b>√</b> |          | <u> </u>      | $\vdash$ | H  | Н        |
|                 |          | V        | <b>√</b> | ✓        | √        |        |          |          |          | $\vdash$      | 1   |             | 52      | -        | Ť             | ✓        | √<br>√   |          |               | T        | $\vdash$   | Н        |
|                 | 3        | 1        | \<br>\   | <b>√</b> | <b>→</b> | _      |          | ┢        |          | ┪             | 1   |             | 53      | _        |               | ✓        | ✓        |          |               | ┢        | $\vdash$   | H        |
|                 | 4        | V        | ✓        | <b>√</b> | <b>√</b> | Т      | $\vdash$ | Ι        | _        | <del> </del>  |     |             | 54      | $\vdash$ |               | Ĭ        | <b>√</b> |          | -             | _        |  | Н        |
|                 | 5        | <b>√</b> | <b>√</b> | ✓        | V        |        |          |          |          |               |     | ٠.          | 55      |          | _             | Ť        | Ť        | _        | $\vdash$      | H        | <del>                                     </del> | Н        |
|                 | 6        | 7        | <b>√</b> | <b>√</b> | Ì        |        |          |          |          |               |     |             | 56      |          |               |          |          |          |               |          |  |          |
|                 | 7        | 7        | \<br>\   | <b>√</b> | V        | _      |          | _        |          |               |     |             | 57      | -        | _             |          |          |          | H             |          |  |          |
|                 | 8        | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> |        |          |          |          | -             | 1 1 |             | 58      |          | _             |          | _        | _        | ┢             | 一        | _  |          |
|                 | 9        | <b>√</b> | <b>√</b> | <b>√</b> | V        |        |          |          |          |               |     |             | 59      |          |               |          |          |          |               |          | Т  |          |
|                 | 10       | V        | <b>√</b> | V        | <b>√</b> |        |          |          |          |               |     |             | 60      |          |               |          |          |          |               |          | $\vdash$   |          |
|                 | 11       | <b>√</b> | ✓        | <b>√</b> | V        |        |          |          |          |               |     |             | 61      |          | $\overline{}$ |          |          |          |               |          |  |          |
|                 | 12       | <b>√</b> | ✓        | <b>√</b> | V        |        |          |          |          |               |     |             | 62      |          |               |          |          | _        |               |          |  |          |
|                 | 13       | ✓        | V        | V        | V        |        |          | _        |          |               |     |             | 63      |          |               |          |          |          |               |          | П  |          |
|                 | 14       | ✓        | ✓        | ✓        | V        |        |          | Ė        |          |               |     |             | 64      |          |               |          |          |          | _             | $\vdash$ | П  |          |
|                 | 15       | <b>√</b> | <b>√</b> | <b>√</b> | V        |        |          |          | _        |               | Ì   |             | 65      |          | _             |          |          |          |               |          | Н  |          |
|                 | 16       | ✓        | Ţ        | V        | V        |        |          |          |          |               |     |             | 66      | _        |               |          |          |          |               |          |  |          |
|                 | 17       | V        | V        | Ţ        | Ì        |        |          |          |          |               |     |             | 67      |          |               |          |          |          |               |          | Н  |          |
| •               | 18       | ✓        | V        | V        | V        | _      |          |          |          |               |     |             | 68      |          |               |          | $\neg$   |          |               |          |  |          |
|                 | 19       | <b>√</b> | V        | <b>√</b> | V        |        |          |          |          | H             | l   |             | 69      |          |               |          | $\neg$   |          | -             | -        | Н  | $\neg$   |
|                 | 20       | V        | V.       | <b>√</b> | V        |        |          |          |          | $\vdash$      |     |             | 70      |          |               |          |          |          |               |          |  |          |
|                 | 21       | V        | V        | V        | V        |        |          |          |          | $\vdash$      |     |             | 71      |          |               |          | $\neg$   |          |               |          |  |          |
|                 | 22       | V        | V        | V        | Ì        |        |          |          |          | $\vdash$      |     |             | 72      |          |               |          | $\neg$   |          |               |          |  | $\Box$   |
|                 | 23       | V        | V        | Ì        | -        |        |          | 7        |          | _             |     |             | 73      |          |               |          |          | _        | $\overline{}$ | -        |  | Н        |
|                 | 24       | V        | V        | -        | -        | _      |          |          |          | $\overline{}$ |     |             | 74      |          |               |          |          |          |               |          |  |          |
|                 | 25       | V        | V        | -        | -        |        |          |          |          |               |     |             | 75      |          | $\exists$     |          |          |          |               |          |  | _        |
|                 | 26       | V        | V        | -1       | -        | _      |          |          | _        |               |     |             | 76      |          |               |          |          | _        |               |          |  |          |
|                 | 27       | V        | V        | -        | -        |        |          | $\neg$   |          |               |     |             | 77      |          |               | _        |          |          |               |          |  |          |
|                 | 28       | √        | <b>√</b> | -        | -        |        |          |          |          |               | l   |             | 78      |          | $\dashv$      | _        |          |          |               |          |  | _        |
|                 | 29       | V        | V        | -        | -        |        | _        |          |          |               |     |             | 79      |          | 一             | _        | $\neg$   |          |               |          | $\vdash$   |          |
|                 | 30       | V        | V        | -        | -        |        |          |          |          |               |     |             | 80      | $\neg$   | $\dashv$      | $\dashv$ | $\dashv$ |          |               | _        | П  |          |
|                 | 31       | <b>V</b> | V        | -        | -1       | _      | $\neg$   |          |          | -             |     |             | 81      |          | $\dashv$      |          | $\dashv$ |          |               |          |  |          |
|                 | 32       | V        | V        | -        | -1       | T      |          |          |          |               |     |             | 82      | $\neg$   | $\neg$        | $\dashv$ | $\neg$   |          |               |          |  | $\neg$   |
|                 | 33       | V        | V        | 一        | -        | $\neg$ |          |          |          |               | ŀ   | $\neg \neg$ | 83      |          | -             | 1        | $\neg$   | _        |               |          | $\vdash$   | $\dashv$ |
|                 | 34       | -        | V        | <b>V</b> | ✓        |        | $\neg$   | $\neg$   |          |               | Ì   |             | 84      | _        |               | 一        | $\dashv$ |          |               | -        |  | $\neg$   |
|                 | 35       | _        | V        | V        | V        |        | $\neg$   |          | _        | -             | ŀ   |             | 85      |          | $\dashv$      | 寸        | 一        | _        |               | $\vdash$ |  | _        |
|                 | 36       | $\neg$   | V        | V        | ⊽        |        | ┪        |          |          |               | ŀ   |             | 86      |          | 一             |          | _        |          |               |          | $\neg \uparrow$                                  |          |
|                 | 37       |          | V        | V        | V        |        |          |          |          |               | ı   |             | 87      |          | $\neg$        | $\neg$   | T        | .        |               |          |  |          |
|                 | 38       |          | V        | V        | -        |        | $\neg$   |          |          |               | ı   |             | 88      |          | _             |          |          |          |               |          | $\neg$   |          |
|                 | 39       |          | <b>√</b> | <b>√</b> | <b>√</b> | $\neg$ |          |          |          |               | Ì   |             | 89      | $\neg$   |               |          |          |          |               |          |  |          |
|                 | 40       |          | <b>V</b> | V        | <b>√</b> |        |          |          |          |               | ı   |             | 90      | 一        |               | T        | $\neg$   |          |               |          | $\dashv$   | $\neg$   |
| i               | 41       | ╗        | V        | <b>V</b> | <b>√</b> |        |          |          |          |               | Ì   |             | 91      | $\neg$   | T             |          | T        | $\neg$   |               |          | ヿ  | $\neg$   |
|                 | 42       |          | V        | V        | 1        |        |          | T        |          |               | ļ   |             | 92      |          | $\neg$        | $\neg$   |          |          |               |          | $\dashv$   | $\neg$   |
|                 | 43       | $\neg$   | V        | V        | V        |        | $\neg$   | _        | $\neg$   |               |     |             | 93      | 一        | 寸             | $\dashv$ | 7        | $\dashv$ |               |          | $\dashv$   | $\dashv$ |
|                 | 44       | 寸        | V        | V        | V        | ╛      | $\neg$   | $\neg$   |          | $\neg$        | - 1 |             | 94      | _        |               |          | 1        | $\neg$   |               | $\neg$   | 一  | $\dashv$ |
|                 | 45       | 1        | <b>√</b> | V        | Ť        | 寸      | $\neg$   | _        |          |               | ı   |             | 95      |          | _             | 7        | $\dashv$ |          | $\neg$        |          | 一  | ᅥ        |
|                 | 46       |          | V        | Ì        | V        |        | _        | $\dashv$ |          | $\neg$        | f   |             | 96      | - 1      | _             | $\dashv$ | +        | -        |               |          | 一  | $\dashv$ |
|                 | 47       |          | V        | V        | V        | $\neg$ | $\dashv$ | _        |          | $\neg$        | l   | 1           | 97      |          | _             | 寸        | $\dashv$ | $\dashv$ | -             | $\dashv$ |  | $\neg$   |
| $\neg \uparrow$ | 48       | Ħ        | V        | V        | V        | $\neg$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$      | ı   |             | 98      | 一        | $\neg$        | $\dashv$ | 7        | 一        |               |          | $\dashv$   |          |
|                 | 49       | $\neg$   | V        | V        | V        | $\neg$ |          | $\neg$   | $\dashv$ | $\neg$        | ľ   |             | 99      | 寸        | ┪             | $\dashv$ | $\dashv$ | $\dashv$ |               | $\neg$   | 一  | $\dashv$ |
|                 | 50       |          | <b>1</b> | 7        | V        | _      |          |          | $\dashv$ |               | ı   |             | 100     | _        |               | ┪        | $\neg$   | $\neg$   | $\neg$        | $\neg$   | ヿ  | ᅦ        |
|                 |          |          | • 1      | • 1      |          |        |          |          |          |               | L   |             |         | _        |               |          | 1        |          |               | 1        |  |          |

| Cli   | aim                             | Date         |          |          |          |              |                    |          |              |                 |  |
|-------|---------------------------------|--------------|----------|----------|----------|--------------|--------------------|----------|--------------|-----------------|--|
| - 01  |                                 |              | 1        |          | , '      |              | Ť                  | Г-       | Т            | $\dashv$        |  |
| Final | Original                        |              |          |          |          |              |                    |          |              |                 |  |
|       | 101<br>102                      |              |          |          |          |              |                    |          |              | П               |  |
|       | 102                             |              |          |          | П        | Г            |                    |          |              |                 |  |
|       | 103                             |              |          |          |          |              |                    |          |              |                 |  |
|       | 104<br>105                      |              |          |          |          |              |                    |          | L            |                 |  |
|       | 105                             |              |          | <u> </u> |          |              | $oxedsymbol{oxed}$ |          | Ŀ            | Ш               |  |
|       | 106                             |              |          | _        | <u> </u> | _            | 匚                  | _        |              | Ш               |  |
|       | 107                             |              |          |          | <u> </u> |              | L                  | _        | <u>L</u>     | Ш               |  |
|       | 108                             | _            |          | _        | <u> </u> | L.           | <u> </u>           | <u> </u> | <u> </u>     | Щ               |  |
|       | 109                             | <u> </u>     | -        | <u> </u> | <u> </u> | ļ            | L                  |          | ļ            | $\square$       |  |
|       | 110<br>111                      | <del> </del> |          | <u> </u> | ┝        |              | <u> </u>           | <u> </u> | -            |                 |  |
|       | 111                             | -            |          |          | ┝        | ┢            | -                  | -        | $\vdash$     | $\vdash$        |  |
|       | 112                             | -            | -        |          | ⊢        | ⊢            | -                  | ⊢        | $\vdash$     | Н               |  |
|       | 112<br>113<br>114               |              | $\vdash$ |          | $\vdash$ | ⊢            | ┢                  | ┢        | $\vdash$     | Н               |  |
|       | 115                             | -            | -        | -        | $\vdash$ | $\vdash$     | ┢                  |          | -            | Н               |  |
|       | 115<br>116                      | _            | ├─       |          | ┢        | $\vdash$     | $\vdash$           | $\vdash$ | $\vdash$     | Н               |  |
|       | 117                             |              | $\vdash$ |          | H        | T            |                    |          | <del> </del> | Н               |  |
|       | 118                             |              |          |          | <u> </u> | <u> </u>     | _                  | ┢        | $\vdash$     | Н               |  |
| -     | 110                             |              |          |          |          |              | $\vdash$           |          |              | Н               |  |
|       | 120                             |              |          |          |          |              |                    |          |              | П               |  |
|       | 120<br>121<br>122               |              |          |          |          |              | $\vdash$           |          |              | П               |  |
|       | 122                             |              |          |          |          |              |                    |          |              |                 |  |
|       | 123                             |              |          |          |          |              |                    |          |              |                 |  |
|       | 123<br>124<br>125               |              |          |          |          | <u> </u>     |                    |          |              | Ш               |  |
|       | 125                             |              |          | L        | _        |              |                    | _        | _            |                 |  |
|       | 126                             | _            |          |          | _        |              | <u> </u>           |          | <u> </u>     | Щ               |  |
|       | 127                             |              |          | _        |          | _            | <u> </u>           | <u> </u> | _            | $\vdash$        |  |
|       | 128                             |              |          | _        |          | _            | ⊢                  | <u> </u> |              |                 |  |
|       | 126<br>127<br>128<br>129<br>130 |              | _        | _        |          |              | _                  | $\vdash$ |              | $\vdash$        |  |
|       | 131                             |              |          |          |          | -            | ┝                  | H        | -            | $\vdash$        |  |
|       | 131<br>132                      |              |          |          | $\vdash$ | <del> </del> | _                  |          |              | Н               |  |
|       | 133                             |              |          | -        |          |              |                    |          |              | Н               |  |
|       | 134                             |              |          |          |          | $\vdash$     | <u> </u>           |          |              | Н               |  |
|       | 135                             |              |          |          |          |              | -                  |          |              | Н               |  |
|       | 136                             |              |          |          |          |              |                    |          |              | П               |  |
|       | 137<br>138                      |              |          |          |          |              |                    |          |              | П               |  |
|       | 138                             |              |          |          |          |              |                    |          |              |                 |  |
|       | 139                             |              |          |          |          | Ш            |                    |          |              |                 |  |
|       | 140                             |              |          |          |          |              |                    |          |              |                 |  |
|       | 141                             | _            |          |          |          |              |                    |          | _            |                 |  |
|       | 142                             |              |          |          |          | Щ            | $\vdash$           | $\vdash$ | <u> </u>     | Щ               |  |
|       | 143                             |              |          | -        |          | <u> </u>     | $\vdash$           | L        | <u> </u>     | $\sqcup$        |  |
|       | 144                             | -            |          |          |          | _            | _                  | _        | <b>-</b>     | $\vdash \vdash$ |  |
|       | 145<br>146                      |              | -        | -        | _        |              |                    | _        | $\vdash$     | $\vdash \vdash$ |  |
|       | 147                             |              | $\dashv$ | $\dashv$ |          | _            | _                  | -        | H            | $\dashv$        |  |
|       | 148                             | $\dashv$     | -        | $\dashv$ | -        | Н            | Н                  | $\dashv$ | Н            | $\dashv$        |  |
|       | 149                             | $\dashv$     |          | $\dashv$ |          |              |                    |          | $\vdash$     | $\vdash$        |  |
|       | 150                             | -            | $\neg$   | $\dashv$ | $\dashv$ | $\vdash$     | $\vdash$           |          | Н            | $\vdash$        |  |
|       | .50                             |              |          |          |          | ليب          |                    | $\Box$   |              | ل               |  |